

Choose 1 of 3 fun Art challenges, and try some amazing Science experiments to amaze your family!

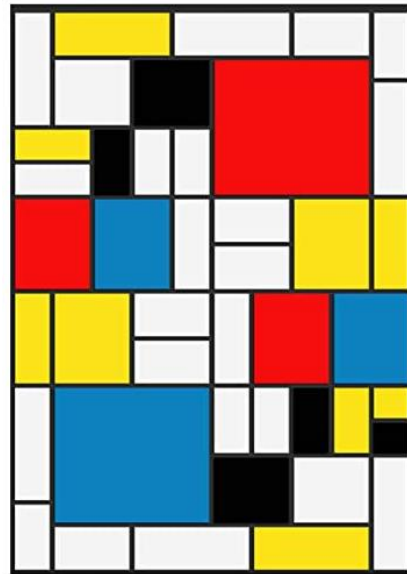
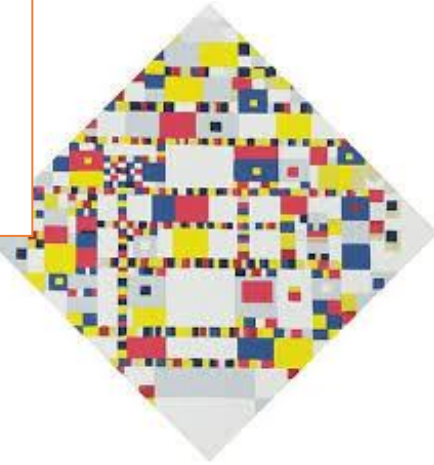
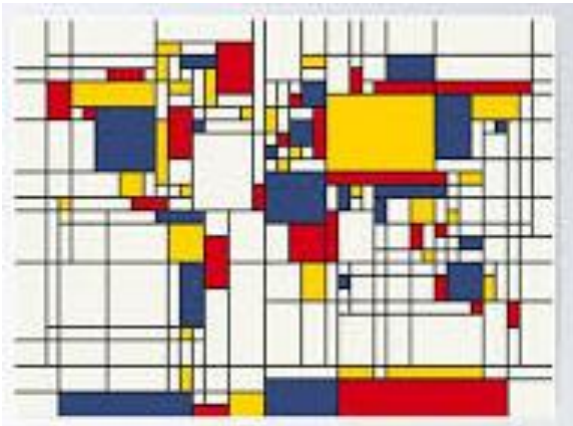
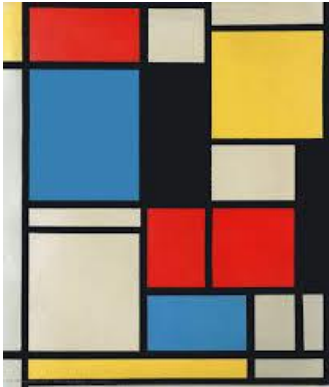
Please email us your creations - we would love to see them!

Challenge 1 - Piet Mondrian

Create your own picture in the style of the artist Piet Mondrian.

In one of the sections/boxes, you could write some facts about the artist:

Here are some examples:

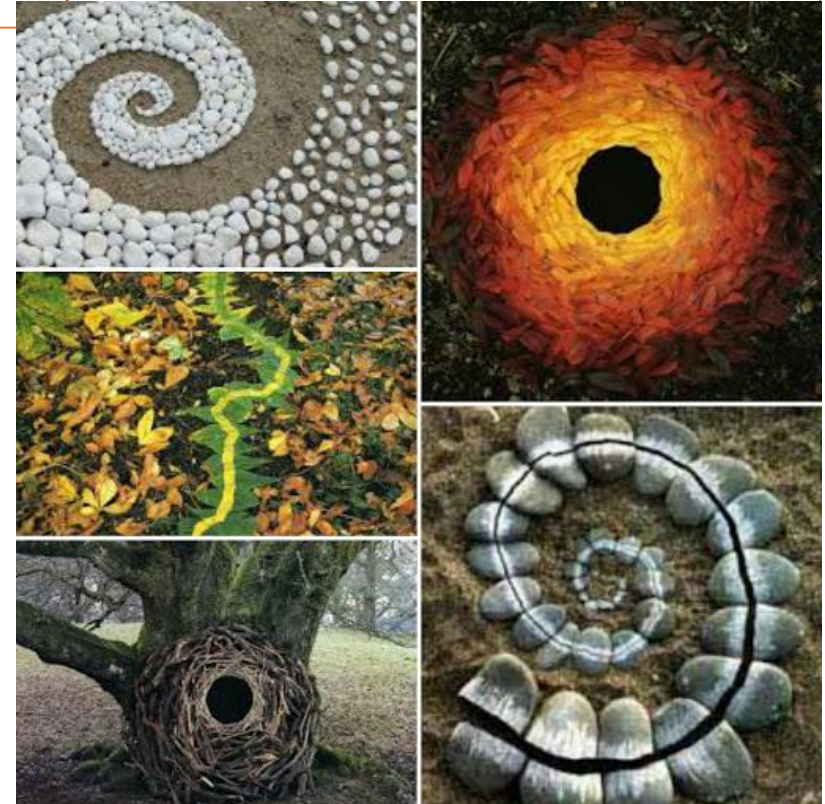


Challenge 2 - Andy Goldsworthy

If you can get outside, you might want to make something in the style of Andy Goldsworthy, where he uses items from nature to create his artworks.

You could use flowers, leaves, stones, cones etc, but **please remember to check first before you take anything to make sure you are not damaging anything.**

Here are some examples:



Challenge 3 - Hannah Hoch

Hannah Hoch used pictures to create collages and photomontages. Here are 2 of her pieces:



Here is an artwork inspired by her, by an artist called Alan Magee called Portrait of Hannah Hoch.

We would like you to create your own collage/photo montage using magazine/newspaper pictures. **Please ask before you use anything though - they may be important!**



Science!

Testing air pressure!

Can you turn the

"Keeping dry" or

"Sealed by air"

experiments on the

next page into magic

tricks to amaze your

family?



Under pressure

The air around you pushes against you all the time, and so does water when you're in it. Scientists call this pressure. When you squeeze air or water, its pressure increases. Try these experiments to see what happens to water and air under pressure.

Sinking diver

1. Find a piece of paper that will fit halfway round a large plastic bottle. Draw or paint an underwater scene on it and tape it around the bottle, so you can see it from the front.



3. Cut out a diver shape from thin, coloured plastic. Then press the diver on to the paperclip with poster tack.

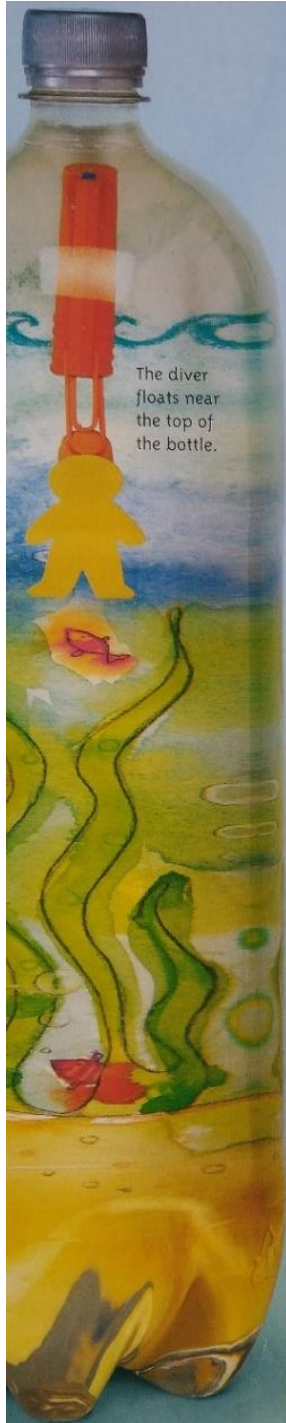
The diver must be narrow enough to fit through the neck of the bottle.



2. Find a pen lid with a pocket clip, and attach a paperclip, like this. If there is a hole in the top of the lid, block it with a little poster tack.



4. Put the diver in a tall glass of water. The model should float near the top. If it's too heavy and sinks, remove some of the poster tack.



The diver floats near the top of the bottle.



For a link to a website where you can try a pressure experiment with two straws and a drink, go to www.usborne-quicklinks.com

5. Fill the bottle with water. Then carefully lower the diver through the neck and screw the lid on.



6. Squeeze the sides of the bottle and the diver will sink. Then let go, and the diver will float up to the surface again.

The diver will move slowly at first, so watch carefully.



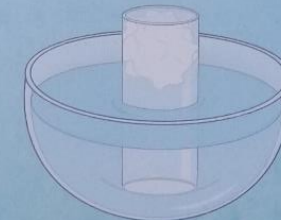
What's going on?

An air bubble is trapped in the pen top when you drop the diver in. Squeezing the bottle pushes water up the top which squashes the air bubble and lets water in, making the diver sink. When you stop squeezing, the air bubble returns to normal size, pushing the water out. So the diver floats again.

Keeping dry



1. Fill a sink or large bowl with water. Then stuff a piece of paper into the bottom of a tall glass.

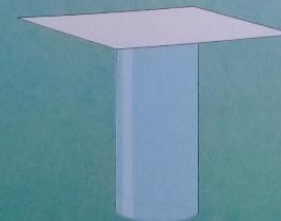


2. Plunge the glass into the water upside down. Then lift out the glass and check the paper. Is the paper wet?

What's going on?

As the glass plunges into the water, the water pushes on the air inside the glass. The more the air is squashed, the more it pushes back against the water. Because they push at the same time, water doesn't get in and the paper stays dry.

Sealed by air



1. Fill a glass to the brim with water. Lay a postcard on top of the glass, so that it totally covers the top.



2. Holding the postcard against the glass, turn the glass upside down over a sink. Let go of the postcard.

What's going on?

The postcard doesn't fall because air pushes against it and seals it to the rim of the glass. So the water stays inside the glass, instead of running out. The only way water can get out again is if you break the seal by removing the postcard.